MANAGEMENT UNIT 3 - OGDEN

Boundary Description

Weber, Box Elder, Cache and Morgan counties - Boundary begins at Hyrum and SR-101; east on SR-101 to the Ant Flat Road (at Hardware Ranch); south on this road to SR-39; west and south on SR-39 to SR-167 (Trappers Loop Road); south on SR-167 to SR-30 at Mountain Green; west along SR-30 to Interstate 84; west on I-84 to Interstate 15; north on I-15 to US-91; east and north on US-91 to SR-101; east on SR-101 to Hyrum.

The Ogden deer herd unit is located within Weber, Cache, Box Elder and Morgan counties. Municipalities located within or along the unit boundaries include: Hyrum, Wellsville, Mantua, Perry, Willard, Ogden, Mountain Green and Huntsville. The major drainages are the Little Bear River, Ogden River and Box Elder Creek. Smaller drainages are Davenport Creek, Paradise Dry Canyon, Hyrum Dry Canyon, Hyrum Green Canyon, Perry Canyon and Willard Canyon. The topography is steep and rough on the western face of the Wasatch Mountains above Willard, Perry, Ogden, east of Avon and Paradise, and more gentle in-between. Elevation ranges from 4,400 feet near Willard to 9,764 feet on Willard Peak. According to the most recent Utah Big Game Management Plan (1998), there is approximately 233,469 acres of useable deer winter range in the unit. Summer range totals 152,887 acres. A majority of the winter range (82%) and summer range (72%) is on private land. The U.S. Forest Service administers 19% of the summer range and 13% of the winter range. The Division of Wildlife Resources maintains 6% of the deer summer range and 5% of the winter range on the unit.

Major deer wintering areas are found between 4,600 feet and 7,000 feet on the Wasatch face above Willard and Perry; between 5,100 to 7,000 feet north and east of Mantua Reservoir; from 5,600 to 7,000 feet in the Three-Mile Canyon; and between 5,400 and 7,000 feet along the slopes on the southeast side of Cache Valley above Paradise and Avon. During severe winters, snow restricts deer use to Three-Mile Canyon, the East Fork of the Little Bear River, the area south of Porcupine Reservoir, Paradise Dry Canyon, Hyrum Dry Canyon, Perry Canyon and the southeast corner of the unit south of Willard (King and Muir 1971).

Management unit 3 supports approximately 135,907 acres of useable elk summer range and 165,542 acres of elk winter range. Approximately 80% of the summer and 81% of the winter range is privately owned. Most of the remaining range is administered by the U.S. Forest Service and the Division of Wildlife Resources.

Big Game Management Objectives

Unit management objectives for mule deer are to achieve a modeled target population size of 12,000 wintering deer, and a postseason buck-doe ratio of 15:100 with 30% of these bucks being 2-point or better. Unit management elk objectives call for 1,200 wintering elk with the postseason herd composition consisting of a bull to cow ratio of 8:100, with at least half of these bulls being $2\frac{1}{2}$ years of age or older (DeBloois et. al 2001). The overall trend for mule deer fawns/100 does over the past decade appears to be fairly stable, averaging just over 70 fawns/100 does. The high was 96 fawns/100 does in 1998-99, while the low was 45 in 1993-94 (Evans et. al 1996, DeBloois et. al 2001). Continued urbanization and loss of critical winter range on this unit may jeopardize target herd unit objectives.

Study Site Description

Management unit 3 contains a total of 17 trend studies, all of which are located within the winter range. Twelve of these studies were established in 1984, the other five in 1985. All were reread in 1990 and 1996. In 2001, 8 studies were reread, while 9 studies were suspended. Studies were suspended for several reasons. These included the lack of wildlife use, urban development, and sites not being rehabilitated following wildfires resulting in the loss of key browse, primarily sagebrush. Suspended sites will be reevaluated during the next rotation in 2006 to determine whether they will be reread or permanently suspended. Detailed location descriptions, data tables, and a written summary for each study follow.

SUMMARY

MANAGEMENT UNIT - 3 - OGDEN

Unit 3 contains a total of 17 trend studies. Twelve of these studies were established in 1984, the other five in 1985. All of the studies were reread in 1990 and 1996. In 2001, 8 studies were reread, while 9 studies were suspended. Studies were suspended for several reasons. These reasons included little to no wildlife use, urban development, and sites not being rehabilitated following wildfires resulting in the loss of key browse, primarily sagebrush. Suspended sites will be reevaluated during the next rotation to determine whether they will be reread or permanently deleted.

Unit Wide Trends

In 2001, a common finding on range trend studies in Unit 3 was the increase in nested frequency of bulbous bluegrass. This species significantly increased in nested frequency on 6 of the 8 trend studies that were read in 2001. This species is a low value perennial that has many characteristics of annual species. It is highly competitive, has low forage value after spring, and can increase the fire hazard when overly abundant. Studies in this unit have the added problem of poor forb composition. Weedy increasers, both annual and perennial species, are widespread and make up the majority of the forb component on most of the sites in the Ogden unit. These species include ragweed, prickly lettuce, yellow salsify, western yarrow, pacific aster, tarweed, curlycup gumweed, thistle, storksbill, and Dyers woad. Dyers woad is a noxious weed and is spreading rapidly in some areas of the unit.

A common finding on the unit in 1996 was the high average soil temperature. This is usually the result of abundant rock on the surface and in the profile or the result of a steep slope combined with a west or south aspect. This causes excessive drying of the surface soil horizons by early summer and gives winter annuals like cheatgrass a competitive advantage over more desirable perennial species. Extra care must be used when grazing these ranges during the spring as they can easily be pushed toward an annual grass dominated system.

A major factor influencing vegetative trends is drought. Precipitation data from several weather stations within management unit 3 show alternating wet and dry cycles since range trend study sites were first established in 1984. For the most part, the early to mid-1980's were above normal in precipitation, the late-1980's were drier than normal and the early to mid-1990's were again wetter than normal. From 1999 to the present, a trend of at or below normal precipitation has again emerged. Low snowpack during the winters and/or dry spring and summers in 2000 and 2001 occurred throughout many areas of Utah. Lower than normal precipitation, especially in consecutive years, likely plays a primary role in increased decadency and decreased reproduction in shrub populations, primarily big sagebrush. In 2001, low precipitation also resulted in the decrease in perennial forbs in unit 3. This same trend was observed in the northeast region during the summer 2000. In unit 3, sum of nested frequency for perennial forbs decreased on half of the trend studies read in 2001. In 2001, perennial grasses actually increased in sum of nested frequency on 7 of the 8 studies in unit 3, mostly due to the increase in bulbous bluegrass discussed above.

As a result of the high soil temperatures, the abundance of weedy species, extended drought and past heavy use, many sites now support limited browse densities. Wildfires burned through three sites prior to the 1996 rotation, effectively eliminating the browse component. Apparently, none of these burns were rehabilitated, leaving them vulnerable to future fires and further site deterioration. Overall use of the browse on sites which still support sufficient densities, is currently mostly light to some moderate.

Trend Summary

	Category	1984	1990	1996	2001
3-2 Northeast Mantua Reservoir	soil	est	3	5	3
	browse	est	5	3	3
	herbaceous understory	est	3	1	5
3-3 Clay Basin	soil	est	3	5	3
	browse	est	3	3	3
	herbaceous understory	est	4	2	4
3-4 Anderson Ranch	soil	est	3	5	3
	browse	est	5	3	3
	herbaceous understory	est	4	2	4
3-5 Mathias Canyon	soil	est	3	5	susp
	browse	est	3	3	susp
	herbaceous understory	est	3	1	susp
3-6 White's Orchard	soil	est	3	4	3
	browse	est	4	3	2
	herbaceous understory	est	3	2	2
3-7 Mouth of Pearson's Canyon	soil	est	3	5	susp
	browse	est	5	3	susp
	herbaceous understory	est	1	1	susp
3-8 Facer Canyon	soil	est	3	3	susp
	browse	est	5	1	susp
	herbaceous understory	est	1	1	susp
3-9 Cook Canyon	soil	est	3	5	3
	browse	est	3	3	2
	herbaceous understory	est	4	1	4
3-10 Hyrum Canyon	soil	est	4	5	susp
	browse	est	5	3	susp
	herbaceous understory	est	2	1	susp

^{(1) =} down, (2), slightly down, (3) = stable, (4) = slightly up, (5) = up (est) = site established, (susp) = suspended

	Category	1984	1990	1996	2001
3-12 Three-Mile Canyon	soil	est	3	5	3
	browse	est	1	3	2
	herbaceous understory	est	2	2	3
3-13 Perry Basin	soil	est	3	2	susp
	browse	est	2	1	susp
	herbaceous understory	est	5	3	susp
	Category	1985	1990	1996	2001
3-14 Uintah Junction	soil	est	3	5	susp
	browse	est	1	3	susp
	herbaceous understory	est	2	3	susp
3-15	soil	est	3	4	susp
Ogden Canyon	browse	est	2	3	susp
	herbaceous understory	est	2	3	susp
3-16 Maple Canyon	soil	est	3	5	susp
	browse	est	3	1	susp
	herbaceous understory	est	2	1	susp
3-17 Middle Fork	soil	est	3	5	3
	browse	est	3	4	3
	herbaceous understory	est	3	2	3
3-18	soil	est	3	5	3
Geertsen Canyon	browse	est	1	5	2
	herbaceous understory	est	1	2	3
	Category	1984	1990	1996	2001
3-19 Brigham Face	soil	est	3	3	susp
	browse	est	5	3	susp
	herbaceous understory	est	3	3	susp

^{(1) =} down, (2), slightly down, (3) = stable, (4) = slightly up, (5) = up (est) = site established, (susp) = suspended